Remarks

Claim Objections

Claim 21 is objected to because it is unclear which of the previously listed components contains the function of "with current limiting and below the voltage required by a bus user" (lines 10-11)". Claim 21 is amended to clarify that the ascertaining device comprises means for applying a current limited low voltage to the output. Thus, the claim language of claim 21 is analogous to claim 32. The Examiner did not object to claim 32. Consequently, Applicant respectfully maintains that claim 21 should no longer be objected to.

Claim Rejections under 35 USC 103

The Examiner repeated the objections issued in the last office action without responding in detail to the arguments set forth by Applicant in the Amendment of June 11, 2008. In particular, the Examiner refers to the similar fields of endeavor of Buhring, Ying, and Prendel, and the EN50254 standard.

Applicant has not denied that the technical fields of the references cited are related. Rather, Applicant's arguments are based on the fact that <u>a person of ordinary skill in the art cannot combine the content of the references in a reasonable manner so as to derive the present invention</u>. Further, a person of ordinary skill would not be motivated to combine the cited references.

Valid rejection under 35 USC 103(a) requires evidence of a suggestion or motivation for one skilled in the art to combine prior art references to produce the claimed invention. US Court of Appeals for the Federal Circuit (*Ecolochem inc. v Southern California Edison Co., Fed. Cir.*, No. 99/1043, 9/7/00).

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The best defense against hindsight-based obviousness analysis is the rigorous application of the requirement for showing a teaching or motivation to combine the prior art references, according to the court.

Buhring, Ying and Prendel do not motivate or suggest to one skilled in the art to combine these references to produce Applicant's claimed invention.

Court of Appeals for the Federal Circuit confirmed the above principles in In Re Sang-Su Lee (00-1158). The court analyzed 35 USC 103 requirements starting from the Administrative Procedure Act and held (citations omitted):

"Tribunals of the PTO are governed by the Administrative Procedure Act, and their rulings receive the same judicial deference as do tribunals of other administrative agencies.

"The Administrative Procedure Act, which governs the proceedings of administrative agencies and related judicial review, establishes a scheme of "reasoned decision making." Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational.

"As applied to the determination of patentability vel non when the issue is obviousness, it is fundamental that rejections under 35 USC §103 must be based on evidence comprehended by the language of that section. (Emphasis added). When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. (Emphasis added)

"The factual inquiry whether to combine references must be thorough and searching. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. Our case law makes clear that the best defense against the subtle but

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<u>powerful attraction of a hindsight-based obviousness analysis is rigorous application of the</u>

<u>requirement for a showing of the teaching or motivation to combine prior art references.</u> There must

be some motivation, suggestion or teaching of the desirability of making the specific combination that

was made by the Applicant. Teachings of references can be combined <u>only</u> if there is some

suggestion or incentive to do so."

As stated above, **<u>Buhring, Ying and Prendel</u> do not motivate or suggest to a person skilled**

in the art to combine these references to duplicate the claims of the present invention.

Consequently, the claims should be patentable over the cited references.

Specifically, as the Examiner has already acknowledged, Buhring does not disclose any of the

features of:

- An ascertaining device comprising

- A device for detecting the electrical load at the supply voltage output, the ascertaining device

- The voltage being below the voltage required by a bus user of the control and data

   transmission installation to the supply voltage output, wherein

- The device for detecting the electrical load at the supply voltage output ascertains the flow of

   the current resultant from applying the low voltage to the supply voltage output, and whereby

   the connecting device connects the supply voltage input in series to the supply voltage output

   if the ascertaining device does not detect an overload in response to the flow of current

   resultant from applying said low voltage by comparison with a prescribed limit value of the

   electrical load stored in said memory device.

Clarified claim 21 now further defines: means for current limited appliance of a low voltage

below 24 volts to the supply voltage output. This does not add new matter, but merely is a

clarification of the claimed invention.

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The Examiner asserts that these features would be known from Ying. Specifically, according to

the Examiner, Ying would disclose an apparatus for connecting modules to a supply voltage in series.

This feature would be disclosed in Figs. 7A-8G, items 703, 705 and item 704, col. 4, lines 22-32.

However, these parts in Ying refer to the wiring of the communication lines, but not the electrical

wiring. If, for example, a number of LAN devices are connected, the data connection is via a serial

cable. In general, the power grid is separate from the data lines and power supply is independent

from the communication.

According to the Examiner, the connecting device would be known from items 644, a, b in

Fig. 6. However, as it is obvious from this Figure, these switches connect to the main data bus, but

not to the power supply. Thus, unlike the present invention, the feature of a connecting device for

connecting the supply voltage input in series to the supply voltage output in response to an

ascertaining device for ascertaining at least one electrical variable at the supply voltage output is not

known from Ying.

Further, with respect to the ascertaining device, the Examiner refers to the CPU's 315 and 612

shown in Figs. 3 and 6 and the corresponding passages in the specification (col. 5, lines 34-67; col.

10, lines 9-34; col. 13, lines 60-67; and col. 14, lines 1-21).

Col. 5, lines 34-67 discloses that CPU 315 has access to memory and is connected to a

keyboard and interface block.

Col. 10, lines 9-34 discloses that CPU 612 is connected to an uplink transceiver and a dual port

RAM.

Col. 13, line 60 to col. 14, line 21 describes that the switches 644a, 644b are operated under

the control of CPU 612. As already discussed above, the switches 644a, 644b connect to the data

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bus, rather than the power grid. Thus, the feature of an ascertaining device that ascertains the electrical load is not met by the CPUs 312 and 612.

In general, Ying's method is based upon sending requests via the bus in case of a fault. If a fault occurs, the nodes open their switches, thereby disconnecting from the bus. Then, requests are sent to the slave nodes. If the requests are not answered by a slave node, the faulty node is localized. In contrast thereto, the present invention as defined in the claims refers to the subsequent serial connection to the power supply after testing the connection with a low voltage. As previously stated in the last Amendment, a slave node according to Ying's method needs a power sufficient to operate. Otherwise, a properly working node would be unable to respond to the request.

Finally, Prendel also fails to disclose how the state of a power supply line is tested. Contrary to the Examiner's opinion, Applicant respectfully notes that Prendel does not disclose that a low operating voltage being lower than the operating voltage of the bus user is applied.

Given the above distinctions between the cited references and the present invention, Applicant respectfully maintains that the claims are allowable.

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Response Under 37 CFR 1.116
Expedited Procedure
Examining Group 2836

Applicant respectfully requests a one month extension of time in which to respond to the outstanding Office Action. PTO 2038 is included herewith, authorizing charging a credit card for the prescribed one month extension fee of $130. Please charge any ADDITIONAL fees due by virtue of this Amendment to deposit account 11-0665. A duplicate of this page is included for this purpose.

The present submission is necessary to place the claims in condition for allowance or better condition for appeal. No new matter is added.

Wherefore, further consideration and allowance of the claims as amended is respectfully requested.

Respectfully submitted,

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CERTIFICATE OF SUBMISSION BY FACSIMILE TRANSMISSION

I hereby certify under 37 CFR §1.8(a) that this correspondence is being submitted to the Mail Stop AF with Fee, Art Unit 2836, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 by facsimile on 10/29/2008, fax number 571 273 8300.

M. Robert Kestenbaum

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